

Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.

17-1
P6915L

PLANT INTRODUCTIONS
RECEIVED
4 NOV 1930
U. S. DEPARTMENT OF AGRICULTURE

PLANT INTRODUCTIONS

NINETEENTH ANNUAL LIST

Season 1930-1

Containing Descriptions of the More Important
Introduced Plants Now Ready
For Experimenters

Office of Foreign Plant Introduction
Bureau of Plant Industry
United States Department of Agriculture
Washington, D. C.

All plants sent out by this office to experimenters are inspected at the Plant Introduction Gardens by officers of the Plant Quarantine and Control Administration. At the time this Annual List goes to press the inspection has not been made. It is possible, therefore, that quarantine regulations may prevent the sending out of a few plants herein described.

The presence of the Mediterranean fruit fly in Florida makes it necessary to restrict the distribution of plants grown at Chapman Field to the state of Florida. Such plants are therefore not included in either the present annual descriptive list or check list.

PLANT INTRODUCTIONS.

Experimenters will please read carefully this introductory note before sending in their requests for plant material.

This, the Nineteenth Annual List of Plant Introductions, contains descriptions of many new and rare plants, not yet widely tested in this country. The available information concerning some of them is meager, and it is therefore impossible to speak with assurance regarding their value, their cultural requirements, and their adaptability to the various climates and soils of the United States.

These plants have been imported because it is believed some direct or indirect use can be made of them. They are first placed at the disposal of the experts engaged in plant breeding, crop acclimatization, and horticultural investigations generally in the United States Department of Agriculture and the State Experiment Stations. Some of them have been grown in sufficient quantity, however, so that they can be distributed to some private experimenters who have the facilities to test them carefully. The List is therefore sent to those who have qualified as Experimenters with the Office of Foreign Plant Introduction, and who have indicated a willingness to care for material sent them.

Accompanying this Annual List are complete Check Lists showing all plants available for distribution at the several Plant Introduction Gardens during the season 1930-1 and the Garden from which available. Applicants for material should fill out all blanks at the top of the Check List of each garden from which they request plants, place a mark to the left of the F.P.I. (Foreign Plant Introduction) number of each plant desired, and return the lists promptly to this Office.

It should be distinctly understood that the Office does not agree to supply all the plants requested. It reserves the right to limit the number or to withhold the entire request of any experimenter in order that it may place the material according to its best judgment.

It will be noted that this list is shorter than some former lists. Each succeeding list will be shorter, in all probability, until it contains only such miscellaneous material as remains after institutional and special experiments are provided for.

The shipping season extends, as a rule, from December first to April first. Because of the large quantity of plants which must be handled, it is difficult for the Office to single out individual requests and ship them at a certain date; where there are valid reasons, however, for requesting that material be sent at a specified time, every effort will be made to meet the requests.

These plants are placed in the hands of experimenters with the understanding that reports on their behavior will be sent to this Office from time to time. It is particularly desired that reports be sent to this Office regarding the flowering, fruiting, hardiness, utilization and other interesting features of plants which have been sent for trial; and it is expected that experimenters will at all times preserve the original labels sent with the plants, or accurate plats showing the location and F. P. I. numbers of each one. Failure to comply with these directions will be considered sufficient reason for a discontinuance of the cooperative relation.

It will be necessary for experimenters to preserve and refer to the Annual List of Plant Introductions, or to the Inventories published by the Office, for information regarding the plants. Each Inventory lists the seeds and plants imported during a period of three months. Its object is to serve as an historical record; it is not printed immediately following the arrival of the plants, but eighteen to twenty-four months later. The edition is limited, and it cannot be supplied to all experimenters. This makes essential the preservation of the Annual List as a work of reference, and the Office desires to urge upon its cooperators the importance of this step. Unless the Annual lists are preserved, the Office later will be flooded with inquiries from people who have received plants and who desire information concerning them. Answering such inquiries involves much unnecessary labor and expense.

For convenience in using the Annual List, after each description is given in parenthesis the name of the Garden from which the plants will be sent.

Descriptive List.

80061. *ACACIA LONGIFOLIA SOPHORAE*. Acacia. From South Yarra, Melbourne, Victoria, Australia. Seeds presented by F. J. Rae, Director of the Melbourne Botanic Gardens. A rapid-growing, evergreen species forming spreading bushes or small trees. The leaflike phyllodes vary from 1 - 3 inches, generally smaller than the type. The flowers are yellow, in short axillary spikes. It is said to be excellent for planting near the sea coast. (Chico, Calif.)

65018. *ADENOCARPUS FOLIOLOSUS*. From Mercedes, Teneriffe, Canary Islands, at an altitude of 2,300 feet. A leguminous shrub in general habit like a genista with crowded branches and leaves. The yellow flowers are numerous, in compact terminal racemes. For trial in hot arid regions having mild winters. (Chico, Calif.)

27336. *AMYGDALUS FENZLIANA*. From Tiflis, Caucasus, Russia. A low, shrubby almond, more or less spiny, which produces an abundance of white flowers early in the spring. It is a native of semi-arid regions in the Caucasus, and may be of value as a stock for the southwest. (Chico, Calif.)

32374. *AMYGDALUS PERSICA*. Peach. This variety originated at the Government Experiment Farm, San Antonio, Texas, among a lot of plants grown from seeds obtained in Mexico by G. Onderdonk. It is a medium-sized clingstone fruit, with golden yellow flesh, firm, sweet, of good texture and unusually fine flavor. Promising for home canning purposes. At Chico, California, it matures in late August; at San Antonio, Texas, about the first of September. (Chico, Calif.)

41395. *AMYGDALUS PERSICA*. Dwarf Peach. From Kiayingchau, Kwantung, China. Seeds presented by George Campbell. A dwarf, evergreen, ornamental Chinese peach with showy flowers, grown in its native land as a house plant. At the Plant Introduction Garden, Chico, California, a tree of this variety is about 7 feet high, with a spread of 10 feet, and with deep-green, heavy, compact evergreen foliage. The small, white clingstone fruits, sometimes colored on the sunny side, about 2 inches in diameter, are fragrant, with firm, acid, greenish white flesh, stained dark red near the pit and insipid in flavor. Ripening season at Chico, early September. (Chico, Calif.)

43127. *AMYGDALUS PERSICA*. Ideal Peach. From New Zealand. Plants presented by H. R. Wright. An elongated oval, freestone peach, about $2\frac{1}{2}$ inches in length, with yellow, red-mottled skin, and firm, lemon-yellow, mildly acid flesh of good quality. The pit is pink, staining the flesh slightly. In California this variety ripens about the middle of July; in Georgia and Connecticut it ripens 10 days ahead of Elberta. It has promise for home use, and also for drying and shipping. (Chico, Calif.)

43129. *AMYGDALUS PERSICA*. Late Champion Peach. From New Zealand. Plants presented by H. R. Wright. This late-maturing freestone peach appears to thrive as far north as New Jersey and southern Michigan, in Oklahoma, and also in California. The tree is large and vigorous, and bears a good crop of roundish fruit about $2\frac{1}{2}$ inches in diameter. The skin is yellow, tinged with red, and the golden-yellow flesh is sweet, spicy, and of good texture. The pit is small and pink. At Chico, California, it matures early in October; it is of promise as a late dessert peach, and should be good for shipping and canning. (Chico, Calif.)

43134. AMYGDALUS PERSICA. Osprey Improved Peach. From New Zealand. Presented by H. R. Wright. Fruits nearly spherical, about $2\frac{1}{2}$ inches in diameter; skin greenish yellow overlaid with light red on exposed side, thin, tender; flesh white, rather soft, very juicy, subacid, of good quality, slightly stained around pit, freestone. Ripens about the middle of August at Chico, Calif. Recommended for home use. (Chico, Calif.)

43137. AMYGDALUS PERSICA. Up-to-Date Peach. From New Zealand. Plants presented by H. R. Wright. A vigorous, prolific variety which bears free-stone fruits, averaging about $2\frac{3}{4}$ inches in diameter, with golden-yellow skin mottled with red. The sweet, juicy, melting flesh is of high quality; the medium-sized pit is pink, slightly staining the flesh. Its ripening season is the same as that of Elberta, and it thrives as far north as New Jersey. For trial as a home fruit, and for shipping and drying. (Chico, Calif.)

55563. AMYGDALUS PERSICA. Peach. Plants budded from a seedling grown and selected at the Plant Introduction Garden, Chico, California, from seed obtained through John R. Putnam, American Consul at Valencia, Spain. Fruits large, clingstone, about $2\frac{1}{2}$ inches in diameter, yellow with a red blush; flesh golden yellow throughout and of excellent flavor; pit small. This variety promises to be of value as a commercial canning peach. It remains firm when cooked, retains its delicate flavor, and does not require a heavy syrup. The fruit ripens at Chico the latter part of August. (Chico, Calif.)

55564. AMYGDALUS PERSICA. Peach. Plants budded from a selected seedling, grown and selected at the Plant Introduction Garden at Chico, California, from seed obtained through John R. Putnam, American Consul at Valencia, Spain. Fruits round, about $2\frac{1}{4}$ inches in diameter; skin golden yellow, blushed red. Pit small and yellow, clingstone, not coloring the dark yellow flesh, which is very firm and of good flavor. This peach ships well and may have value for canning. The variety ripens at Chico about the middle of August. (Chico, Calif.)

55813. AMYGDALUS PERSICA. Peach. Budded from a seedling grown and selected at the Plant Introduction Garden, Chico, California. Fruits round, yellow with red cheeks, slightly flattened at the ends and bulging in the center; about $2\frac{1}{2}$ inches in diameter. Flesh yellow, very juicy, of good quality; freestone, slightly stained by the very small pit. In flavor this variety compares favorably with Late Crawford; it is about a week later than Elberta, and in texture it is better than the latter. (Chico, Calif.)

55836. AMYGDALUS PERSICA. Peach. Plants budded from a selected seedling of the variety TARDIO AMARILLO from Spain, grown at the Plant Introduction Garden, Chico, California. Fruits round, about $2\frac{1}{2}$ inches in diameter; skin orange-yellow; flesh dark lemon-yellow, firm, fairly juicy, of good quality, clinging to pit, slightly stained by pit. Appears to have promise as a canning variety. Ripens at Chico, California, in late August. (Chico, Calif.)

63850. AMYGDALUS PERSICA. Peach. A seedling of the SHALIL peach, a variety of which seeds were introduced from the Kuram Valley, Northwest Provinces, India. Fruits round to oval, about 2 inches in diameter; skin light yellow, thin, tender, separating easily from flesh; flesh golden yellow, rather soft, juicy, not stained around pit;

pit $1\frac{1}{4}$ inches long, sharp pointed; a free-stone. Tree large and vigorous, satisfactory at Chico as a stock. Fruit recommended for drying and canning. (Chico, Calif.)

68352. *AMYGDALUS PERSICA*. Pullar's Cling Peach. From New South Wales, Australia. Obtained from C. E. Vessey. Fruits nearly spherical, about $2\frac{1}{2}$ inches long; skin dark rich yellow colored on one side with red blush or stripings; flesh firm, dark lemon yellow or orange, somewhat tough, medium juicy, slightly red at the pit, slightly acid, flavor good. Appears to have the qualities of a good canning peach. (Chico, Calif.)

68353. *AMYGDALUS PERSICA*. Golden Queen Peach. From New South Wales, Australia. Obtained through Elwood Mead. Fruits generally spherical, about $2\frac{1}{2}$ inches long; skin firm, uniformly orange-yellow, with medium heavy fine tomentum; flesh firm, medium fine texture, orange-yellow, medium juicy, mildly subacid, clinging tightly to pit, of good quality, but lacking in special aroma; not stained at pit; pit medium size. Appears to be a good canning peach. (Chico, Calif.)

68354. *AMYGDALUS PERSICA*. Goodman's Choice Peach. From New South Wales. Obtained through Elwood Mead. Fruits nearly spherical, about $2\frac{1}{2}$ inches in diameter; skin yellow, colored in part or almost wholly by dark red; flesh dark lemon-yellow, firm, moderately juicy, with little or no staining at pit, of rich, sweet flavor, cling-stone. Recommended as an excellent canning peach. Ripens at Chico, late in August. (Chico, Calif.)

61302. *AMYGDALUS PERSICA X PERSICA NECTARINA*. Hybrid Peach. A hybrid variety produced by J. E. Morrow by crossing the Bolivian Cling peach (No. 36126) and the Quetta nectarine (No. 34684). Fruits nearly spherical, about 2 inches in diameter; skin light greenish yellow, colored with red at stem end and side; flesh white, juicy, firm, with pleasing peach flavor; clingstone; pit comparatively large. A good fruit for home use. (Chico, Calif.)

34685. *AMYGDALUS PERSICA NECTARINA*. Quetta Nectarine. Presented by Lieut. W. L. Maxwell, Quetta, Baluchistan. The tree is large, handsome, and unusually hardy for a nectarine, although it thrives best in regions not having severe winters. The large, round fruits, slightly over 2 inches in diameter, are green, heavily blotched with red. The greenish flesh, strongly marked with red around the pit, is juicy and of rich, tart flavor. This is an unusually good nectarine, sufficiently firm to ship well. (Chico, Calif.)

43139. *AMYGDALUS PERSICA NECTARINA*. Ansenne Nectarine. From New Zealand. Plants presented by H. R. Wright. Fruits large, nearly $2\frac{1}{2}$ inches long, freestone, dark red on the exposed side, cream-colored dotted with red on the unexposed side. The flesh, which is creamy white, melting and juicy, is of excellent quality but very soft and perishable and stained by the light red pit. The tree is prolific. At Chico, California, this variety ripens late in July or early in August. (Chico, Calif.)

43140. *AMYGDALUS PERSICA NECTARINA*. Diamond Jubilee Nectarine. From New Zealand. Plants presented by H. R. Wright. The fruits of this freestone variety are about 2 inches in diameter and are dark green with a dark-red cheek. The creamy yellow flesh, which is somewhat stained by the light-red pit, is very juicy, sweet and of

excellent flavor and quality. At Chico, California, it ripens from late July to early August. (Chico, Calif.)

43141. AMYGDALUS PERSICA NECTARINA. Gold Mine Nectarine. From New Zealand. Plants presented by H. R. Wright. A prolific variety bearing fruits which average $2\frac{1}{4}$ inches in length, with red and yellow skin, and creamy white flesh of excellent flavor and high quality. The light-red pit is of medium size. At Chico, California, this nectarine ripens in late July and early August, and in central New Jersey at the same time as the Elberta peach. (Chico, Calif.)

74011. AMYGDALUS PERSICA NECTARINA. Pineapple Nectarine. From Topfield, Mass. Presented by James Marlboro. An English variety, grown there as a greenhouse nectarine. The bright-red fruits are of good size, with yellow rather acid flesh of good flavor. It ships well. Ripens at Chico, Calif., early in July. (Chico, Calif.)

43142. AMYGDALUS PERSICA NECTARINA. Lippiatt's Late Orange Nectarine. From New Zealand. Plants presented by H. R. Wright. The fruits of this freestone variety are about 2 inches in diameter, with deep-orange skin mottled with red; the flesh is firm, juicy, sweet, and of good texture with an excellent flavor. It should be a good shipper. At Chico, California, it ripens in late July or early August. (Chico, Calif.)

43144. AMYGDALUS PERSICA NECTARINA. New Boy Nectarine. From New Zealand. Presented by H. R. Wright. A freestone nectarine of medium size, with green skin mottled with red; the flesh is red near the pit, and of fair quality. At the Plant Introduction Garden, Chico, California, this has proved to be a productive variety, ripening in late July or early August. (Chico, Calif.)

43146. AMYGDALUS PERSICA NECTARINA. Surecrop Nectarine. From New Zealand. Presented by H. R. Wright. Fruits round, about $2\frac{1}{8}$ inches in diameter; skin tender, light greenish yellow, overlaid largely with dark red; flesh white, sweet, moderately juicy, subacid, slightly stained at pit. A productive variety, ripening at Chico, California, in late July or early August. (Chico, Calif.)

68178. AMYGDALUS PERSICA NECTARINA. Nectarine. A variety of unknown origin, grown at Chico. Fruit very large, spherical, about $2\frac{1}{2}$ inches in diameter; stem heavy; skin almost uniformly yellow-green sometimes overlain with more or less red; flesh medium firm, greenish white, moderately juicy, mildly subacid, of good rich flavor and of excellent quality; pit of medium size, slightly staining flesh. Fruit ripens at Chico the latter part of August. (Chico, Calif.)

81671. ANIGOZANTHOS MANGLESII. Amaryllidaceae. From Perth, Western Australia. Seeds presented by Miss Helen Ogden. An amaryllidaceous plant native to the Swan River country of southwestern Australia. It bears scorpioid racemes, nearly a foot long, on stout, woolly, bright red stems. The lustrous green, tomentose flowers, 3 inches long, are tubular in bud but split nearly to the base on opening, with the tips recurved, and bear the yellow stamens on the curve. For trial in the southern United States. (Chico, Calif.)

77543. ARTHROPODIUM CIRRHATUM. Liliaceae. From Nelson, New Zealand. Presented by A. Wilkinson, New Zealand Alpine and Rock Garden Society. An herbaceous perennial

bearing tall somewhat branched stalks, with small leafy bracts subtending the drooping white flowers. These are about 1 inch in diameter with slender tube and reflexed but spreading lobes and conspicuous stems and pistil, somewhat like *Anthericum*. For trial in the southeastern states and the Pacific northwest. (Chico, Calif.)

78400. *BETULA DAVURICA*. Birch. From Keijo, Chosen, Japan. Seeds presented by M. Towaza, Director of the Forestal Experiment Station. A tree up to 60 feet high, with wide-spreading branches and purplish brown flaky bark. The broadly wedge-shaped leaves are 2 to 4 inches long and are dark green above and have serrate margins. For trial in the northern states. (Bell, Md.)

75415. *BETULA JAPONICA*. Birch. From Sapporo, Japan. Collected by R. K. Beattie, Bureau of Plant Industry. A white-barked birch up to 60 feet high, with broadly oval leaves. Probably hardy throughout the United States. (Bell, Md.)

56562. *BILLARDIERA LONGIFLORA*. Pittosporaceae. From Hobart, Tasmania. Presented by L. A. Evans, Secretary of Agriculture, Agricultural and Stock Department. A twining shrub, sometimes several feet in length, with leaves varying from oval to linear and 2 inches long. The flowers, greenish yellow, often changing to purple, are pendulous on solitary stems an inch long. For trial in the southern half of the United States. (Chico, Calif.)

23012. *BUXUS HARLANDII*. From Hangchow, Chehkiang, China. This Chinese species is almost as slow in growth as the dwarf box commonly used for edgings. It differs from this chiefly in its longer leaves, often $1\frac{1}{2}$ inches long on vigorous shoots, and its tendency to form rather broad, flat-topped bushes. The species suffers from winter-killing near Washington, D. C. For trial in the southern states and California. (Chico, Calif.)

78532. *CALLISTEMON CITRINUS*. Lemon Bottlebrush. An evergreen shrub or small tree up to 20 feet high, with lanceolate leaves 1 to 3 inches long, reddish when young, and spikes, 2 to 4 inches long, of small flowers with long bright-red stems. Native to southeastern Australia. For trial in California and the Gulf States. (Chico, Calif.)

67072. *CANDOLLEA CUNEIFORMIS*. Candolleanaceae. From Blackwood, South Australia. Presented by Edwin Ashby. A shrubby much branched evergreen shrub up to 8 feet in height with crowded, sessile wedge-shaped leaves, and terminal bright-yellow five-petaled flowers, somewhat like single roses. For trial in the Gulf States and California. (Chico, Calif.)

78744. *CASTANEA MOLLISSIMA*. Hairy Chestnut. From Fa Hua Ssu Temple, near Peiping, China. Seeds obtained through Peter Liu. A spreading tree reaching heights up to 60 feet. Native to central and northern China. The trees are resistant in varying degrees to the chestnut blight and are variable in size and vigor and in the quality and quantity of nuts produced. The nuts in general resemble the American chestnut in size, color and taste. Young seedlings will be sent in lots of not less than 25, with the understanding that they will be planted in orchard form in good soil. They should be spaced 35 to 40 feet apart each way and when so planted will require about one acre. The shipping weight of 25 trees is about 20 pounds. For trial west of the Mississippi River. (Chico, Calif.)

75718. CERATOSTIGMA WILLMOTTIANUM. Plumbaginaceae. From western China. Presented by Hugh Evans, Santa Monica, California. A shrubby species forming large rounded bushes, 1 to 3 feet high with angled purplish stems, bristly leaves and masses of deep-cobalt-blue flowers an inch across from all the upper axils. The best flowers are produced from late summer till frost. For the southern states and the Pacific Coast. (Bell, Md., and Chico, Calif.)

37954. CHAENOMELES LAGENARIA CATHAYENSIS. Quince. From Shantung, China. Collected by Frank N. Meyer, Agricultural Explorer. A large-fruited variety, used by the Chinese to perfume their living rooms, but used by foreign missionaries to make preserves and jellies. (Chico, Calif.)

21617. CHIONANTHUS RETUSA. Chinese Fringetree. From Shantung, China. Collected by Frank N. Meyer, Agricultural Explorer. The Chinesefringe tree resembles our native species in general habit but differs in having smaller leaves and smaller panicles of flowers. The linear petals are broader than those of our species and make a greater show. Believed by some to be the superior species, but so different that both species might well be grown. (Chico, Calif.)

76862. CHORIZEMA CORDATUM. From Victoria, Australia. Presented by F. J. Rae, Melbourne Botanic Gardens. An Australian leguminous shrub with slender weak branches and coarse oaklike leaves similar to those of C. ilicifolium except for the cordate base, and axillary and terminal racemes of flowers similar to that species except that the pea-shaped flowers are smaller, with reddish standards and darker red wings. For trial in southern California and southern Florida. (Chico, Calif.)

65003. CISTUS CRISPUS. Rockrose. From Ronda, Spain. Collected by David Fairchild, Agricultural Explorer. A compact shrub about 2 feet high with narrow sessile leaves. The deep pink flowers like small single roses are borne near the tips of the shoots. Native to southern Europe. For trial in the southern United States. (Chico, Calif.)

65004. CISTUS SALVIFOLIUS. Rockrose. From Ronda, Spain. Collected by David Fairchild, Agricultural Explorer. A white-flowered rockrose of southern Spain where it covers great stretches of country in the cork-oak forests around Ronda. For trial in the southern United States. (Chico, Calif.)

70900. CISTUS SYMPHYTIFOLIUS. Rockrose. From Orotava, Teneriffe, Canary Islands. Seeds collected by David Fairchild, Agricultural Explorer. A species something like the more familiar C. laurifolius but with deep rose-red flowers blotched yellow at the base and somewhat narrower foliage. (Chico, Calif.)

57350. CISTUS VILLOSUS. Rockrose. From Cambridge, England. Presented by H. G. Carter, Cambridge Botanic Garden. An erect hairy shrub, 3 to 4 feet high, with wrinkled, gray-green leaves and reddish-purple flowers about 2 inches in diameter, borne singly or in threes. Native to the Mediterranean region. Probably tender north of southern Ohio. (Chico, Calif.)

72793. CLEMATIS CHRYSOCOMA SERICEA. From England. Presented by Dr. A. W. Hill, Director, Royal Botanic Garden, Kew. An ornamental Chinese vine about 20 feet high with silky hairy rounded leaves and solitary or paired white flowers 3 to 4 inches across. For trial throughout the United States. (Chico, Calif.)

82069. *CLERODENDRUM FOETIDUM*. Rose Glorybower. From Japan. Seeds collected by Dorsett and Morse, Agricultural Explorers, between Kaquemoei and Chicilu, Japan. A semihardy evergreen Chinese shrub 6 feet high, with cordate leaves 8 inches long, and dense capitate cymes of fragrant rosy red flowers. When killed to the ground the young shoots that are produced bloom in the autumn of the same season. For trial in the southern states and California. (Bell, Md.)

75442. *CORNUS CONTROVERSA*. Giant Dogwood. From Japan. Seeds collected by R. K. Beattie, Bureau of Plant Industry. Japanese name, Midzuki. A Japanese tree up to 60 feet high, with a trunk 7 feet in girth. In general habit much like our native dogwood, with long horizontal branches, sometimes touching the ground but with small yellowish white flowers in flat clusters 6 or 7 inches in diameter, followed by dark blue or blackish fruits much like our native cornels. For trial in all except the coldest parts of the United States. (Chico, Calif.)

30294. *CRATAEGUS AMBIGUA*. Hawthorn. Native on the slopes of the mountains in eastern Cappadocia and northern Armenia. A tree 16 feet high, upright, spreading, with long slender branches; bark gray. Leaves roundish, $1\frac{3}{4}$ inches across, petioles long and slender. Fruit $\frac{1}{2}$ inch in diameter, brilliant red, on long slender stems; flesh soft, pulpy. (Chico, Calif.)

39557. *CRATAEGUS LAVALLEI*. Hawthorn. From California. Presented by Frank J. Hart. A hawthorn originally from France and probably of hybrid origin. It is a small shrubby tree about 20 feet high with few-flowered clusters of large, white flowers having red disks and followed in autumn by bright orange fruits, well set off by the lustrous leaves. (Chico, Calif.)

66069. *CRATAEGUS PINNATIFIDA*. Chinese Hawthorn. From China. Collected by F. A. McClure, Agricultural Explorer. A hardy shrub or small tree, native to northeastern China, with dark-red edible fruits. For trial throughout the United States. (Chico, Calif.)

69826. *CRATAEGUS PINNATIFIDA*. Chinese Hawthorn. From Manchuria. Seeds obtained by P. H. Dorsett, Agricultural Explorer. Same as preceding (No. 66069). (Bell, Md.)

33214. *CYDONIA OBLONGA*. De Antequera Quince. From Granada, Spain. Obtained from Pedro Giraud. A fairly prolific variety which bears round oblate fruits with yellow skin and light-yellow non-astringent flesh good for eating out of hand. It is good for cooking and preserving and makes excellent jelly. At Chico, California, it ripens the first week of November. Probably hardy except in the extreme north. (Chico, Calif.)

67353. *CYTISUS MONSPESSULANUS*. Broom. From the Canary Islands. Presented by the Director, Cambridge Botanic Garden, England. A leguminous shrub about 10 feet high with fragrant bright-yellow flowers in small racemes. For trial in the southern United States. (Chico, Calif.)

65011. *CYTISUS STENOPETALUS*. Broom. From the Canary Islands. Collected by David Fairchild, Agricultural Explorer. A handsome shrub or small tree, 20 feet or less in height, with silky-hairy foliage, and elongated racemes of bright-yellow flowers. In the Canary Islands this shrub is used for feeding goats. For trial in the southern United States. (Chico, Calif.)

77619. EPHEDRA DISTACHYA. Common Jointfir. From Peshawar, Northwest Frontier Province, India. Seeds presented by A. M. Mustafa, Agricultural Officer, through Renwick S. McNiece, American Consul, Karachi, India. A low-growing, rigid tufted shrub, with erect green leafless branches and small red fruits. Native to Europe and Asia. (Bell, Md.)

75324. ERLANGEA CORDIFOLIA. Asteraceae. From British East Africa. Collected by L. W. Kephart and R. L. Piemeisel, Agricultural Explorers, Bureau of Plant Industry. A tropical herbaceous plant with an abundance of small deep-purple, tubular-shaped flowers in heads. The stems are purple at the base and light green at the top finely pubescent. The alternate leaves have a soft white pubescence beneath. (Chico, Calif.)

78338. ESCALLONIA GLUTINOSA. Escalloniaceae. From Chiddingfold, Surrey, England. Plants obtained from V. N. Gauntlett & Co. A white-flowered variety of an evergreen shrub, native to Chile, with small sessile, thick cuneate-lanceolate leaves about 7 inches long. For trial in the extreme south and California. (Bell, Md.)

78348. ESCALLONIA sp. From Chiddingfold, Surrey, England. Plants obtained from V. N. Gauntlett & Co. Variety Donardensis. A shrub of erect growth, 5 to 6 feet high, bearing, between July and September, flowers of a pale blush color. For trial in the lower south and in California. (Bell, Md.)

8349. ESCALLONIA sp. From Chiddingfold, Surrey, England. Obtained from V. N. Gauntlett & Co. Variety Edinburgh. A beautiful shrub resembling Escallonia langleyensis in habit of growth. The rose-pink flowers are borne abundantly during July and August. For trial in the southern states and California. (Bell, Md.)

78350. ESCALLONIA sp. From Chiddingfold, Surrey, England. Plants obtained from V. N. Gauntlett & Co. Variety Edinensis. A hybrid between variety philippiana (Escallonia virgata) and Escallonia punctata. The small brilliant rose-pink flowers, covering the branches, are borne abundantly between July and September. For trial in the southern states and California. (Bell, Md.)

78351. ESCALLONIA sp. From Chiddingfold, Surrey, England. Plants obtained from V. N. Gauntlett & Co. Variety Microphylla. A dense twiggy bush, 2 to 3 feet high, of dwarf habit, with small evergreen or semi-evergreen leaves and terminal panicles of bright red flowers between July and September. For trial in the south and on the Pacific Coast. (Bell, Md.)

80067. EUCALYPTUS SIDEROPHLOIA. Broadleaf Ironbark. From South Yarra, Melbourne, Victoria, Australia. Presented by the Melbourne Botanic Gardens. An evergreen tree of Queensland and New South Wales, growing to 100 feet and having thick lanceolate-falcate leaves, 3 to 6 inches long. Terminal corymbose panicles of small white flowers are followed by small ovoid fruits. The heavy durable wood is said to be used for tool handles, posts, railway ties and construction work. The tree grows in parts of the coast region of California but does not stand the heat of the interior valleys. It is injured by cold at 20 degrees F. For trial in California and Florida. (Chico, Calif.)

62717. EUONYMUS JAPONICUS. Celastraceae. From Elstree, Herts, England. Presented by Hon. Vicary Gibbs, Aldenham House, England. Variety Compactus Variegatus. A dwarf variety of compact habit, with attractive variegated evergreen foliage. Probably tender north of southern Ohio. (Bell, Md.)

63408. EUONYMUS JAPONICUS. Celastraceae. From Algeria. Collected by David Fairchild, Agricultural Explorer. Variety Microphyllus. An extremely dwarf variety used like box, as a border for flower beds. For trial in the southern half of the United States. (Bell, Md.)

77829. EUONYMUS MAACKII. From northeastern Asia. Presented by the Arnold Arboretum, Jamaica Plain, Massachusetts. Seeds collected at the Arboretum by Paul Russell. A large shrub or small tree with narrowly oval leaves about 3 inches long, and small clusters of pink, four-lobed fruits which have orange-red arils. For trial in the northern states. (Bell, Md.)

70992. EURYA CHINENSIS. Theaceae. From between Sunfung and Lungnam, Kiangsi, China. Collected by F. A. McClure. A low evergreen shrub with small, dentate leaves of tough texture. Small, white drooping fragrant flowers are borne along the whole length of the branches. Although not striking this shrub is said to make a pleasing ornamental and to grow well on rather poor and dry soil. (Bell, Md.)

79539. EUTERPE EDULIS. Para Palm. From Botanic Garden, Dominica, B.W.I. Collected by Allison V. Armour. A Brazilian palm growing 60 to 90 feet high, with a flexuous trunk 8 inches thick and with terminal feathery pinnate leaves 8 to 10 feet long. The flower stalk is 2 to 3 feet long. For trial in extreme southern Florida and southern California. (Bell, Md.)

40719. EVODIA HUPEHENSIS. Rutaceae. From Fenghsien, Shensi, China. Collected by Frank N. Meyer. A medium-sized tree with handsome pinnate leaves, bearing large umbels of whitish flowers followed by large bunches of fruit which, at first green, later turn to a dark-red color. Found in somewhat stony places. Of probable value as an ornamental garden and park tree for the mild-wintered sections of the United States. Chinese name Shan la tzu shu, meaning "mountain pepper tree." (Chico, Calif.)

65014. FUCHSIA CORYMBIFLORA. From the Mediterranean region. Collected by David Fairchild, Agricultural Explorer. A handsome Peruvian fuchsia with large, serrate, acuminate leaves and deep-red flowers. The plant becomes tall but requires support in order to attain full height, and it is therefore adapted for pillars or pergolas in the warmest parts of the United States. (Chico, Calif.)

77969. GOODIA LOTIFOLIA. Fabaceae. From Australia. Presented by R. R. Penny, Briagolong, Victoria, Australia, through C. R. Tillotson, Forest Service. A tall much-branched Australian shrub with 3 ovate leaflets and loose racemes of purple-spotted yellow flowers. (Chico, Calif.)

80550. GREWIA OCCIDENTALIS. Tiliaceae. From Kirstenbosch, Newlands, Cape Province, South Africa. Seeds presented by R. H. Compton, Director of the National Botanic Gardens. The younger parts of this evergreen shrub are covered with rusty tomentum. The dentate cordate leaves are 1 to 2 inches long, and the small flowers, in axillary or terminal cymes, are followed by purplish 4-lobed fruits the size of small peas.

Native to Ethiopia and also the Cape region of Africa. For trial in southern California and southern Florida. (Bell, Md., and Chico, Calif.)

76345. HYMENANTHERA CRASSIFOLIA. Violaceae. From France. Presented by Vilmorin-Andrieux and Company, Verrieres-le-Buisson, Seine-et-Oise, France. A dense half-evergreen New Zealand shrub about 6 feet high with crowded obovate leaves, small yellowish-white or brownish flowers and small berry-like white fruits. For trial in California and the Gulf States. (Chico, Calif.)

24638. ILEX CORNUTA. Chinese Holly. From northern China. Presented by Rev. J. M. W. Farnham. This holly has spiny, dark-green, glossy leaves, and in winter is loaded with clusters of scarlet berries. While it does not make as symmetrical a crown as does the native Christmas holly, *Ilex opaca*, its attractive lustrous foliage and bright-colored fruits render it a fine winter ornamental for the southern half of the United States. (Chico, Calif.)

70980. ILEX sp. Holly. From Kiangsi Province, China. Collected by F. A. McClure. An ornamental 16 to 20 feet high, with fine dark-green foliage and bright-red berries. May be identical with *Ilex cornuta*. For trial in the southern half of the United States. (Chico, Calif.)

75258. INODES TEXANA. Texas Palmetto. From Brownsville, Texas. Seeds collected by Dr. J. N. Rose. An erect handsome fan-leaf palm, up to 50 feet high, native on both banks of the Rio Grande below Brownsville. The trunks of the older trees are smooth, while the persistent leafstalks form a network on the trunks of younger ones. The leaves are borne in a large terminal cluster, and the blades are 5 feet across. The edible fleshy fruits are about 5/8 of an inch in diameter. For trial in southern California and southern Florida. (Chico, Calif.)

78083 JASMINUM STEPHANENSE. From France. Obtained from E. Turbat and Company, Orleans, France. A fragrant hybrid jasmine resembling in general habit the familiar white *Jasminum officinale* but with pink-tinted buds and flowers suggestive of its other parent, *J. beesianum*. Hardy from Philadelphia south. (Bell, Md.)

78403. LARIX DAHURICA. Larch, From Japan. Seed obtained from the Director, Forestry Experiment Station, Keijyo, Chosen, Japan. Variety *Coreana*. A Korean form of the Dahurian Larch which is a tree up to 100 feet high with long horizontal branches, reddish or yellowish branchlets, bright-green flattened leaves, and ovoid cones an inch long. For trial in the northern States. (Bell, Md.)

77703. LIGUSTRUM ACUTISSIMUM. Privet. From Jamaica Plain, Massachusetts. Seeds collected at the Arnold Arboretum by Paul Russell. A loose-growing, much-branched shrub about 10 feet high, with spreading and curving branches, and very narrow sharp-pointed leaves about 2 inches long. The white flowers are borne in dense nodding panicles about an inch long. Native to Japan and China. For trial throughout the United States. (Bell, Md.)

56317. LIGUSTRUM IONANDRUM. Privet. From Yunnan, China. Collected by J. F. Rock, Agricultural Explorer. A compact, ornamental shrub, 10 to 12 feet high, found among limestone boulders on the Likiang Snow Range at altitudes of 10,000 feet. For trial in the southern United States. (Chico, Calif.)

65021. *LONICERA IMPLEXA*. Honeysuckle. From the Mediterranean region. Collected by David Fairchild, Agricultural Explorer. A much-branched shrubby evergreen honeysuckle with perfoliate oval or narrowly oblong leaves and pink fruits in the leaf axils. For trial in the Gulf States and California. (Chico, Calif.)

44394. *LONICERA NITIDA*. Honeysuckle. From Elstree, Herts, England. Presented by Vicary Gibbs, Aldenham House, through E. Beckett. An evergreen shrub native to western China, up to 6 feet high, with upright branches, broadly oval or oblong glossy leaves, fragrant whitish flowers one-third of an inch long, and purple fruits. For trial south of Washington, D. C. (Bell, Md.)

76584. *LONICERA PILEATA YUNNANENSIS*. Honeysuckle. From southwestern China. Presented by Vicary Gibbs, Aldenham House Gardens, Elstree, Herts, England. A prostrate half-evergreen shrub with small privet-like foliage, inconspicuous yellow flowers, and clusters of dainty but not conspicuous dark violet berries. (Bell, Md.)

78147. *LONICERA PILEATA YUNNANENSIS*. Honeysuckle. From southwestern China. Obtained from V. Lemoine and Son, Nancy, France. Same as the preceding (No. 76584.). (Bell, Md.)

81540. *LONICERA* sp. Honeysuckle. From Karinzawa, Japan. Collected by Dorsett & Morse. A bush bearing an abundance of bright red fruits. It should have value as an ornamental in California and the southern States. (Chico, Calif.)

66774. *LOPEZIA HIRSUTA*. Onagraceae. From Rabat, Morocco. Presented by A. Pochon, Director, Jardin d'Essais de Rabat. An ornamental subtropical climbing plant with small pink flowers which make it a peculiarly delicate plant for walls and rockwork. Native to Mexico. For trial in Florida and California. (Chico, Calif.)

65022. *LOTUS GLAUCUS*. From the Mediterranean region. Collected by David Fairchild, Agricultural Explorer. A tender herbaceous deep-rooted perennial, about a foot high, with glaucous, green foliage; closely related to the clovers. It is native to dry, rocky hillsides in the Canary Islands and Madeira. For trial as a cover plant in the Southwest. (Chico, Calif.)

76903. *LUCULIA GRATISSIMA*. Rubiaceae. From Gangtok, Sikkim, India. Presented by the forest manager of Sikkim. A Himalayan shrub up to 15 feet high, growing at altitudes of 4,000 to 5,000 feet, with opposite ovate leaves 6 inches long and gorgeous rounded panicles of pink or rose-colored flowers. For trial in southern California and southern Florida. (Chico, Calif.)

77835. *MAACKIA AMURENSIS*. Fabaceae. From Jamaica Plain, Massachusetts. Seeds collected at the Arnold Arboretum by Paul Russell, Bureau of Plant Industry. A small tree, native to eastern Asia, with orange-brown bark, dull green compound leaves, and short erect clusters of small yellowish white flowers. For trial especially in the north. (Bell, Md.)

81174. *MELALEUCA ACUMINATA*. Myrtaceae. From Ventimiglia, Italy. Seeds presented by S. W. McLeod Braggins, Superintendent, La Mortola. A glabrous bushy shrub with slender branches, mostly opposite lanceolate leaves a quarter of an inch long; and lateral clusters of small whitish flowers. Native to Australia. For trial in the Gulf States and California. (Chico, Calif.)

79137. *MELALEUCA ELLIPTICA*. Myrtaceae. From San Francisco, California. Seeds presented by John McLaren, Superintendent of the Golden Gate Park. A tall evergreen shrub, native to western Australia, with elliptical evergreen leaves half an inch long, and cylindrical spikes of large showy red flowers. For trial in California and the Gulf States. (Chico, Calif.)

67086. *MELALEUCA WEBSTERI*. From Blackwood, South Australia. Presented by Edwin Ashby. A shrub with opposite, narrowly oblong, thick leaves about one-third of an inch long, and roundish heads of small white flowers. For trial in the Gulf States and California. (Chico, Calif.)

75567. *MELALEUCA STYPHELIOIDES*. Myrtaceae. From Melbourne, Australia. Presented by Melbourne Botanic Gardens through Miss Anne McIlvaine. A tall Australian tree, sometimes 80 feet high, with thick spongy bark. The leaves are very small and the small creamy white flowers are in dense spikes about 2 inches long. For trial in the Gulf States and California. (Chico, Calif.)

77192. *MELICOPE TERNATA*. Rutaceae. From Wanganui, New Zealand. Presented by the Town Clerk. A small, much-branched New Zealand tree up to 20 feet high, with opposite compound leaves having three oblong leaflets 4 inches long, small panicles of greenish flowers and small wrinkled fruits which open and display shining black seeds. Very tender. For trial in southern California and southern Florida. (Chico, Calif.)

77605. *MELICOPE TERNATA*. Rutaceae. From New Plymouth, New Zealand. Obtained from Duncan and Davies. Same as the preceding (No. 77192). (Chico, Calif.)

77606. *METROSIDEROS VILLOSA*. Irontree. From New Plymouth, New Zealand. Seeds obtained from Duncan and Davies. A freely branching tree, native to New Zealand, up to 60 feet high and 4 feet in diameter, with coriaceous broadly ovate gray-green leaves, 2 inches long, white tomentose beneath, and terminal cymes of scarlet flowers conspicuous for their long scarlet stamens as in the other bottlebrushes. For trial in southern California and southern Florida. (Chico, Calif.)

30330. *MORUS NIGRA*. Black Mulberry. From Khotan, Sinkiang, China. Collected by Frank N. Meyer, Agricultural Explorer. The berries are large, dark violet-black, and have a fresh, sub-acid taste. They ripen from early August until the end of September. Recommended as a home fruit, more especially in desert regions under irrigation. (Chico, Calif.)

80414. *MYOPORUM ACUMINATUM ANGUSTIFOLIUM*. Myoporaceae. From South Australia. Seeds presented by W. J. Spafford, Deputy Director of the Department of Agriculture, Adelaide. An erect glabrous shrub with alternate nearly linear leaves 1 to 3 inches long, axillary clusters of 2 to 4 small campanulate white flowers, followed by slightly succulent fruits about 1/2 inch in diameter. It is native to Queensland, Australia, but these seeds were obtained from a specimen about 14 feet high, growing in Rochester. For trial in California and the Gulf region. (Chico, Calif.)

80415. *MYOPORUM ACUMINATUM ANGUSTIFOLIUM*. Same as the preceding (No. 80414), except that the seeds were collected from a shrub 9 feet high with fruits $\frac{1}{4}$ -inch in diameter, growing in Pekina. (Chico, Calif.)

80416. *MYOPORUM ACUMINATUM ANGUSTIFOLIUM*. Same as No. 80414, except that the seeds were collected from a shrub about 9 feet high growing in Port Germain, and the fruits are 1/4 inch in diameter. (Chico, Calif.)

64192. *MYOPORUM INSULARE*. From Morocco, Africa. Collected by David Fairchild, Agricultural Explorer. The principal hedge plant and windbreak of the Moroccan coast. It stands clipping well, grows easily from cuttings, is an evergreen of a pleasing dark-green color, will stand several degrees of frost and makes a dense windbreak. (Chico, Calif.)

76927. *PHILLYREA LATIFOLIA*. Oleaceae. From Portugal. Presented by the Chief Forester, Bussaco National Forest. An evergreen shrub or small tree up to 30 feet high, native to the Mediterranean region. The shining dark-green ovate leaves are 2 inches long and the racemes of small flowers are followed by black fruits one-fourth of an inch in diameter. For trial in California and the Gulf region. (Chico, Calif.)

55713. *PHYLLOSTACHYS NEVINII*. Stake-and-forage Bamboo. From China. A hardy, rather dwarf bamboo of the running type, which spreads rapidly by means of rhizomes, or underground stems, and forms an extensive thicket of vertical culms. In sandy soil the rhizomes travel at depths down to 2 or 3 feet. The plant ultimately sends up culms, or canes, to a height of about 18 feet, but culms of maximum height are not produced until 4 or 5 years after the setting out of small plants. Culms 3 or more years old are useful for plant stakes, small fish poles and other purposes on the farm. Not less than 25 plants (total shipping weight about 25 lbs.) will be sent to an experimenter. These are for planting in one area, about 50 feet square, to start a small grove. The first season, however, the plants should be grown in a nursery row in well-fertilized soil and be freely watered in dry weather. In the late winter or early spring of the second year they should be transplanted with a ball of earth to the permanent situation, on good well-drained land, spaced 10 feet each way. (Chico, Calif., and Savannah, Georgia.)

71125. *PINUS KORAIENSIS*. Korean Pine. Obtained from the Forestry Experiment Station, Keijyo, Chosen, Japan. A hardy, slow-growing, pyramidal tree, up to 100 feet; leaves glossy dark green; native to Chosen and Japan. For trial in the northern states. (Bell, Md.)

69819. *PINUS SINENSIS*. Chinese Pine. Obtained by P. H. Dorsett, Agricultural Explorer, in Harbin, Manchuria. A tall tree, up to 70 feet in height, dark gray trunk, with leaves usually two to a cluster. For trial in the northern states. (Bell, Md.)

78405. *PINUS TABULAEFORMIS*. Pine. Obtained from the Director, Forestry Experiment Station, Keijyo, Chosen, Japan. A Chinese pine up to 75 feet high, with dark gray bark on the trunk, red on the branches, and orange or grayish yellow branchlets. The glaucous leaves, usually two in a cluster, are stout and 3 to 6 inches long, and the ovoid cones, 2 to 4 inches long, are pale tawny yellow changing to dark brown and persisting for several years. For trial in the northern states. (Bell, Md.)

21970. *PISTACIA CHINENSIS*. Chinese Pistache. From Shantung, China. A very promising shade tree for those sections of the United States where the summers are warm and the winters only moderately cold. The young leaves are carmine-red, and the autumn foliage gorgeous scarlet and yellow. The wood, which is decidedly heavy and not often attacked by insects, is used in the manufacture of furniture. The young partly opened foliage buds, boiled like spinach, are sometimes eaten by the Chinese. (Chico, Calif.)

68355. *PRUNUS ARMENIACA*. Trevatt Apricot. From New South Wales, Australia. Presented by the New South Wales Department of Agriculture. Trees 9 to 14 feet high, yielding well. Fruits almost round, about 2 inches in diameter; skin smooth, yellow, flesh apricot yellow, rather soft, sweet, of fair quality; pit large, loose in cavity. Ripens at Chico, California, in June. (Chico, Calif.)

38282. *PRUNUS ARMENIACA ANSU*. Apricot Plum. From Shantung, China. Collected by F. N. Meyer, Agricultural Explorer. This species produces a very delicious, golden yellow fruit with reddish blush. The fruit is about 2 inches in diameter. Seems to be a good shipper. For trial in the Gulf States and California. (Chico, Calif.)

76202. *PRUNUS SALICINA*. Japanese Plum. From New Zealand. Obtained from George A. Green, New Zealand Association of Nurserymen. Purple King. Fruits said to be nearly spherical, of attractive appearance, and deep cherry red. The quality is reported good as regards flavor and texture of flesh, and the fruit is said to ship well. (Chico, Calif.)

43182. *PRUNUS SALICINA X CERASIFERA*. Best's Hybrid Plum. From New Zealand. Presented by H. R. Wright. A productive, vigorous variety, with dark green, dense foliage, and heart-shaped, greenish yellow fruits of medium size; flesh yellow, juicy and of fine flavor. Of possible value for shipping and canning. Ripens at Chico, California, late in June. Probably hardy except in the extreme north. (Chico, Calif.)

31652. *PRUNUS SALICINA X CERASIFERA MYROBALANA*. Methley Plum. From Natal, South Africa. Presented by W. J. Newberry, Curator, Botanic Gardens. This plum has attracted wide and favorable comment in California and Texas. In Butte County, California, the trees began bearing at two years from planting, maturing fruits late in May. In Texas where it has withstood severe drought and low temperatures, it matures early in May, and is perhaps the earliest ripening plum in the country. The fruits are of good size, about fifteen to the pound, with dark greenish red skin and firm, dark-red flesh of the finest texture and of pleasant flavor. They are excellent for shipping. Thrives on peach stock. (Chico, Calif.)

76744. *PRUNUS SIBIRICA*. Siberian Apricot. From Harbin, Manchuria. Presented by A. A. Rachkowsky, Manchurian Research Society. A bushy shrub or sometimes a small tree up to 15 feet high, native to Siberia. The long-acuminate-ovate leaves are 2 to 3 inches long and reddish when young, turning bright green; the solitary white or pink flowers are an inch across, and the fruits are yellow with a red cheek but have very little flesh and are hardly edible. For trial in the northern states. (Bell, Md., and Chico, Calif.)

69056-69059. *PRUNUS TOMENTOSA*. Nanking Cherry. From Geneva, New York. Selected by George M. Darrow, Bureau of Plant Industry. For trial throughout the northern United States. (Chico, Calif.)

69056. A large bush producing fruits larger and less acid than the average.

69057. A spreading bush 4 to 5 feet high, producing an abundance of round fruits.

69058. The second best type in the Geneva collection; fruits still on the tree at the middle of August.

69059. A superior strain.

13298. *PUNICA GRANATUM*. Pomegranate. From the Mediterranean region. An excellent and very productive variety with large, bright-red, thin-skinned fruits. The bright-red pulp surrounding the seeds has an acid, vinous flavor. (Chico, Calif.)

33227. *PUNICA GRANATUM*. Pomegranate. From Spain. Obtained by W. T. Swingle, Bureau of Plant Industry. Variety Negro Monstruoso. One of the principal varieties grown in the vicinity of Granada, Spain; of the "Spanish Sweet" type. The fruits are about 3 inches long and wide, deep purplish red to a deep cream color, with pulp of splendid flavor. For trial in the Gulf States and California. This has proved an excellent variety in California, where it ripens in November. (Chico, Calif.)

33229. *PUNICA GRATATUM*. Rogises Pomegranate. From Granada, Spain. Presented by Pedro Giraud. In the neighborhood of Granada are cultivated the finest Spanish pomegranates, and many of the early introductions of this fruit into California in the days of the Spanish occupation were brought from that region. From the same source comes this attractive fruit, which is considered by many as one of the finest of pomegranates. It is of medium size, thin-skinned, highly colored and contains pink, sweet pulp, with soft seeds. Ripens at Chico, California, about the first of November. For trial in the Gulf states and California. (Chico, Calif.)

55997. *PYRACANTHA CRENULATA*. Malaceae. Firethorn. From Yunnan, China. Collected by J. F. Rock, Agricultural Explorer. A dense shrub, 6 to 8 feet high, which grows in arid situations in the valleys south of Likiang. It has bright-yellow berries instead of the scarlet fruits so common in this genus. Probably tender north of southern Ohio. (Chico, Calif.)

40736. *PYRACANTHA CRENULATA KANSUENSI*. Firethorn. From Kansu Province, China. Collected by Frank N. Meyer, Agricultural Explorer. A small shrub, with fine foliage and orange-colored berries of attractive appearance. It grows on stony mountainsides in China, and is recommended for trial everywhere in the United States except the extreme north. (Chico, Calif.)

72814. *PYRACANTHA CRENULATA ROGERSIANA*. Firethorn. From the Himalayas. Presented by Dr. A. W. Hill, Director, Royal Botanic Gardens, Kew, England. A spiny evergreen shrub with orange fruits. Probably tender north of southern Ohio. (Chico, Calif.)

55996. *PYRACANTHA* sp. Firethorn. From Yunnan, China. Collected by J. F. Rock,

Agricultural Explorer. A shapely ornamental shrub 10 to 15 feet high found growing along stream beds. It is covered with bright-scarlet berries from August until winter. Probably hardy as far north as Philadelphia. (Chico, Calif.)

78658. *QUERCUS ACUTISSIMA*. Bristletooth Oak. From Keijyo, Chosen. Collected by R. K. Beattie, Bureau of Plant Industry. A half-evergreen tree, becoming 50 feet high, native to the forests of northern Japan and China. with attractive shining green, chestnut-like foliage, paler beneath. Probably tender north of southern Ohio. (Bell, Md.)

78659. *QUERCUS DENTATA*. Daimyo Oak. From Japan. Obtained by R. K. Beattie, Bureau of Plant Industry, at Shimo Teine, Teine Mura, Hokkaido. Japanese name, Kashiwa. A large tree, native to Chosen and northern and western China, 75 to 80 feet tall. The obovate sinuate-lobed leaves, dark green above and grayish tomentose beneath, are 10 to 12 inches long and 9 inches wide, and the ovoid acorns, an inch wide, are about half covered by the cup which has lanceolate spreading scales. For trial in all but most northern States. (Bell, Md.)

78661. *QUERCUS MONGOLICA GROSSESERRATA*. Oak. From Iwato Mura, Miyazaki Ken, Japan. Collected by R. K. Beattie, Bureau of Plant Industry. This handsome oak is said to be the most important forest tree of Japan, attaining a height of 100 feet and a girth of 12 feet. The wood is durable, and, for a hardwood, easily worked, for furniture approximating the best European and American oaks. (Bell, Md.)

82397. *QUERCUS SUBER*. Cork Oak. From Seville, Spain. Presented by Armstrong Cork Company. A spreading evergreen tree up to 50 feet high, with ovate to oblong leaves remotely serrate. The deeply furrowed spongy bark furnishes the cork of commerce. For trial in the southern States and California. (Bell, Md.)

78515. *QUERCUS* sp. Oak. From Nakama Kaikon, Kagoshima Ken, Japan. Presented by Shimoyaki Eirinsho through R. K. Beattie, Bureau of Plant Industry. Japanese name Ubamegashi. An unidentified Japanese oak, for trial in the southern United States. (Bell, Md.)

78368. *SARCOCOCCA HOOKERIANA HUMILIS*. Buxaceae. From western China. Obtained from V. N. Gauntlett & Co., Ltd., Chiddingfold, Surrey, England. A dwarf evergreen shrub 1 to 4 feet high, with leathery lanceolate leaves 1 to 2 inches long, axillary racemes of small whitish flowers and round black fruits. Probably tender north of southern Ohio. (Bell, Md.)

78387. *SARCOCOCCA RUSCIFOLIA*. Buxaceae. Obtained from G. Reuthe, Keston, Kent, England. An evergreen shrub up to 6 feet high, native to central and western China, with lustrous dark green ovate leaves, small racemes of whitish flowers and dark scarlet fruits. For trial in the southern half of the United States. (Bell, Md.)

78685. *SKIMMIA JAPONICA*. Japanese Skimmia. Obtained from Vilmorin-Andrieux & Co., Paris, France. A dense evergreen Japanese shrub 3 to 5 feet high, with yellowish green leaves 6 inches long crowded at the ends of the branchlets. It bears panicles of small yellowish white flowers and bright red berries a quarter of an inch in diameter. For trial in the southern United States. (Bell, Md.)

21967. *SOPHORA DAVIDII*. Fabaceae. From Peiping, Chihli, China. Obtained by F. N. Meyer, Agricultural Explorer. A spiny leguminous shrub growing 6 to 10 feet tall, bearing small pinnate leaves, loaded with small violet-tinted whitish flowers in spring. Chinese name, Kuei tsi ching. It may be used as a hedge plant and is somewhat drought resistant. It requires pruning when grown as an ornamental. For trial in the southern States and California. (Chico, Calif.)

80371. *STRANVAESIA* sp. Malaceae. From China. Collected by J. F. Rock, National Geographic Society. A handsome tree, 15 to 20 feet high, growing in the forests of Peshui, Likiang Snow Range, Yunnan, at an altitude of 10,500 feet. The autumnal leaves are a brilliant red on the upper whorl and a deep rich glossy green on the lower whorl. The gorgeous red berries are in large dense corymbs and are very ornamental. (Chico, Calif.)

76945. *SWAINSONA GALEGIFOLIA*. Darling Pea. From Melbourne, Australia. Presented by Mrs. Frieda Cobb Blanchard. An Australian subshrub climbing to a height of several feet, with large deep red, pink or white flowers. This species is said to be poisonous to stock. For trial in California and the Gulf region. (Chico, Calif.)

77581. *VERONICA TRAVERSII*. Scrophulariaceae. From New Zealand. Presented by A. Wilkinson, Hon. Secretary and Treasurer, Alpine and Rock Garden Society, Nelson, N. Z. A small compact New Zealand shrub 2 to 5 feet in diameter, with spreading leathery leaves an inch long, and racemes of small white flowers at the tips of the branches. For trial in the Gulf region and California. (Chico, Calif.)

82353. *ZELKOVA SERRATA*. Sawleaf Zelkova. Collected by Dorsett & Morse, Agricultural Explorers, in Keijyo, Chosen. A handsome Japanese tree up to 90 feet high, with a short trunk dividing into many upright spreading branches and forming a broad round-topped head much like an elm. The sharply serrate leaves are ovate and are usually 2 to 3 inches long, or, on young shoots, up to 8 inches long. (Chico, Calif.)

82488. *ZELKOVA SERRATA*. Sawleaf Zelkova. Obtained from the Forestal Experiment Station, Seoul, Korea. Same as the preceding (No. 82353). (Chico, Calif.)

22684. *ZIZIPHUS JUJUBA*. Mu shing hong Jujube. From Tsintse, Shansi, China. Scions obtained by Frank N. Meyer, Agricultural Explorer. The fruits of this variety are ellipsoid, somewhat flattened at the end and of large size, sometimes as much as 1 3/4 inches broad. The stone is medium to large, and sharply pointed. Sometimes the bony portion of the stone does not harden, thus giving rise to what are termed seedless fruits. While trees of this variety do not bear as heavily as do those of some other sorts, the fruits have a high sugar content. An excellent jujube with shapely fruits which process swell. This and succeeding varieties for trial especially in semi-arid regions of the southwest. (Chico, Calif.)

22686. *ZIZIPHUS JUJUBA*. Lang Jujube. From Tsintse, Shansi, China. Scions obtained by Frank N. Meyer, Agricultural Explorer. The fruits are obovoid to pear-shaped, sometimes oblique, of large size, often as much as an inch and a half in greatest diameter. The stone is ellipsoid, medium-sized, tapering to one end which terminates in a sharp spine. This variety is a heavy bearer and the fruits have a high sugar

content. Undoubtedly it is one of the best sorts yet tested in the United States. (Chico, Calif.)

38245. ZIZIPHUS JUJUBA. Sui men Jujube. From Paihsiangchen, Shansi, China. Scions obtained by Frank N. Meyer, Agricultural Explorer. The fruits of this variety are ellipsoid, medium-sized, and up to 1 3/4 inches in length by one half inch in thickness. The stone is medium-sized, tapering toward one end and terminating in a sharp point. The variety is an excellent one for general purposes and processes well. (Chico, Calif.)

38249. ZIZIPHUS JUJUBA. Li Jujube. From Fuma, Shansi, China. Scions obtained by Frank N. Meyer, Agricultural Explorer. This is the largest variety yet introduced into this country and is somewhat later in ripening than most others. The fruits are round to ovoid and 1 1/4 to 2 inches long. The stone is rather large, ovoid, tapering toward one end with a sharp point. An excellent sort and highly recommended. (Chico, Calif.)

